New Jersey Department of Health

Key Facts for the 2012-2013 Influenza Season

Influenza seasons are unpredictable. The severity of influenza seasons can differ substantially from year to year. Over a period of 30 years, between 1976 and 2006, estimates of yearly flu-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people during the most severe season. Each year, in the United States, an estimated 5 – 20 percent of the population can be infected with the flu, and more than 200,000 people may be hospitalized during the flu season.

Much of the United States population is at increased risk from serious flu complications, either because of their age or because they have a medical condition like asthma, diabetes, heart conditions, or because they are pregnant. For example, more than 30 percent of people 50 through 64 years of age have one or more chronic medical conditions that put them at risk of serious flu-related complications. Vaccination remains the best protection against the flu and its complications. Vaccine should be administered as soon as it becomes available and should continue throughout the influenza season.

Advice from a healthcare provider plays a critical role in a person's decision to get vaccinated against season influenza. The Centers for Disease Control and Prevention (CDC) recommends universal flu vaccination for everyone 6 months of age and older.

It is especially important to urge pediatric patients and individuals with neurologic disorders and developmental disabilities to get vaccinated against influenza. A recent study published in *Pediatrics*, found that a large percentage of children dying from complications related to 2009 H1N1 virus infection had chronic neurologic disorders. Of the 336 children reported to have died from 2009 H1N1-associated complications 227 (68 percent) had an underlying health condition. Among those children, 64 percent had a neurologic disorder including development disabilities like cerebral palsy, intellectual disability, or epilepsy.

Pregnant women should also be targeted to receive the influenza vaccine. Lack of awareness of the benefits of vaccination and concerns about vaccine safety are common barriers to influenza vaccination of pregnant and postpartum women. Pregnant women whose provider recommended and offered influenza vaccination were almost 5 times more likely to be vaccinated for influenza than patients who reported that their provider did not make a recommendation or offer influenza vaccination. Providers and pregnant women should be aware that influenza is 5 times more likely to cause severe illness in pregnant women than in women who are not pregnant. Changes in the immune system, heart, and lungs during pregnancy make pregnant women more prone to severe illness from the disease. Risk of premature labor and delivery is increased in pregnant women with influenza. Infant hospitalizations in infants less than 6 months of age are up to 10 times that of older children. However, no influenza vaccines are licensed for use in these children less than 6 months of age. Vaccination during pregnancy has been shown to protect both the mother and her infant (up to 6 months of age) from influenza illness, influenza hospitalizations, and influenza-related preterm births.

Influenza vaccines have been given to millions of pregnant woman over the last decade and have not been shown to cause harm to women or their infants. Women can be vaccinated at any point in the pregnancy

with the inactivated flu vaccine. Postpartum women, even if they are breastfeeding, can receive either the inactivated or live-attenuated vaccine.

Despite CDC's recommendation for annual flu vaccination for all people 6 months of age and older, less than half (42 percent) of Americans were vaccinated during the 2011-2012 season. This is considerably lower than the Healthy People 2020 target of 80 percent for people 6 months through 64 years of age and 90 percent for people 65 years of age and older. Highest coverage was among children 6-23 months (74.6 percent) and adults 65 years and older (64.9 percent). Coverage among women who were pregnant during the influenza season was 47 percent for the 2011-2012 influenza season which is lower than the Healthy People 2020 target of 80 percent.

The viruses in the 2012-2013 United States seasonal influenza vaccine include: an A/California/7/2009 (H1N1)-like virus; an A/Victoria/361/2011 (H3N2)-like virus; and a B/Wisconsin/1/2010-like virus (Yamagta lineage). While the H1N1 virus used to make the 2012-2013 flu vaccine is the same virus that was included in the 2011-2012 vaccine, the recommended influenza H3N2 and the B vaccine virus are different from those in the 2011-2012 influenza vaccine.

Manufacturer's estimate 135 million doses of influenza vaccine will be produced for the United States market this season. During 2011-2012, 132.8 million doses were distributed in the United States. Manufacturers began shipping the vaccine for the 2012-2013 season in late July with distribution continuing through the fall. There are two types of flu vaccines available, the trivalent inactivated vaccine (TIV) and the live-attenuated influenza vaccine (LAIV). Formulations of TIV are available for all people 6 months of age and older including those with chronic medical illnesses. A high dose TIV is approved for people 65 years of age and older and an intradermal vaccine is approved for people 18 through 64 years of age. LAIV is approved for use in most healthy people 2 through 49 years of age who are not pregnant. There is no preferential recommendation between any of the formulations of TIV or LAIV, but clinicians should note the recommended age groups and possible contraindications and precautions for each vaccine.

It is critical that all healthcare professionals lead by example and annually get vaccinated against influenza. Immunization of health care personnel is a critically important step to reduce the spread of influenza in healthcare settings and among the most vulnerable patient populations. Healthcare personnel coverage was estimated at 66.9 percent for the 2011-2012 influenza season, similar to the 2010-2011 season coverage (63.5 percent). However, there is room for improvement as the Healthy People 2020 target for health-care personnel is 90 percent.

For more information, please visit:

CDC Seasonal Flu Page:
www.cdc.gov/flu

NJ Department of Health:
http://www.state.nj.us/health/flu/

Source:

Neurologic Disorders among Pediatric Deaths Associated with the 2009 Pandemic Influenza Pediatrics. 2012 Sep;130(3):390-6. Epub 2012 Aug 29.